



# 2009 Natural Gas State Program Evaluation

for

Tennessee Regulatory Authority

# Document Legend PART:

- O -- Representative Date and Title Information
- A -- General Program Qualifications
- B -- Inspections and Compliance Procedures/Records/Performance
- C -- Interstate Agent States
- D -- Incident Investigations
- E -- Damage Prevention Initiatives
- F -- Field Inspection
- G -- PHMSA Initiatives Strategic Plan
- H -- Miscellaneous
- I -- Program Initiatives



# 2009 Natural Gas State Program Evaluation -- CY 2009 Natural Gas

State Agency: Tennessee Rating:

**Agency Status: 60105(a):** Yes **60106(a):** No Interstate Agent: No

**Date of Visit:** 07/12/2010 - 07/16/2010

**Agency Representative:** Larry Borum, Chie, Pipeline Safety PHMSA Representative: Dale Bennett, PHMSA State Evaluator Commission Chairman to whom follow up letter is to be sent:

Name/Title: Mary Freeman, Chairman Agency: Tennessee Regulatory Authority Address: 460 James Robertson Parkway

City/State/Zip: Nashville, Tennessee 37243-0505

### **INSTRUCTIONS:**

Complete this evaluation in accordance with the Procedures for Evaluating State Pipeline Safety Program. The evaluation should generally reflect state program performance during CY 2009 (not the status of performance at the time of the evaluation). All items for which criteria have not been established should be answered based on the PHMSA representative's judgment. A deficiency in any one part of a multiple part question should be scored as needs improvement. Determine the answer to the question then select the appropriate point value. If a state receives less then the maximum points, include a brief explanation in the space provided for general comments/regional observations. If a question is not applicable to a state, select NA. Please ensure all responses are COMPLETE and ACCURATE, and OBJECTIVELY reflect state program performance. Increasing emphasis is being placed on performance. This evaluation together with selected factors reported in the state's annual certification/agreement attachments provide the basis for determining the state's pipeline safety grant allocation.

# **Field Inspection (PART F):**

The field inspection form used will allow different areas of emphasis to be considered for each question. Question 13 is provided for scoring field observation areas. In completing PART F, the PHMSA representative should include a written summary which thoroughly documents the inspection.

### **Scoring Summary**

PARTS Possible Points		<b>Points Scored</b>	
i A	General Program Qualifications	26	26
В	Inspections and Compliance - Procedures/Records/Performance	31	31
C	Interstate Agent States	7	7
D	Incident Investigations	7	7
Е	Damage Prevention Initiatives	9	9
F	Field Inspection	12	12
G	PHMSA Initiatives - Strategic Plan	10	10
Н	Miscellaneous	3	3
I	Program Initiatives	9	9
TOTAL	LS	114	114
State Rating			100.0



1	Certifica attachm	state submit complete and accurate information on the attachments to its most current 60105(a) ation/60106 (a) Agreement? (NOTE: PHMSA Representative to verify certification/agreement ents by reviewing appropriate state documentation. Score a deficiency in any one area as "needs ement". Attachment numbers appear in parenthesis) Previous Question A.1, Items a-h worth 1 point	8	8
	Yes = 8 N	o = 0 Needs Minor Improvement = 3-7 Needs Major Improvement = 2		
	a.	State Jurisdiction and agent status over gas facilities (1)	$\boxtimes$	
	b.	Total state inspection activity (2)	$\boxtimes$	
	c.	Gas facilities subject to state safety jurisdiction (3)	$\boxtimes$	
	d.	Gas pipeline incidents (4)	$\boxtimes$	
	e.	State compliance actions (5)	$\boxtimes$	
	f.	State record maintenance and reporting (6)	$\boxtimes$	
	g.	State employees directly involved in the gas pipeline safety program (7)	$\boxtimes$	
	h.	State compliance with Federal requirements (8)	$\boxtimes$	
	Upon a rev	iew of the TRA's 2010 Certification Application, all information appeared to be accurate and complete. That supported the information entered into the Certification.	he TRA's o	ffice records provided
	with 60 property Previous Yes = 1 Notes: TRA has ar	state have an adequate mechanism to receive operator reporting of incidents to ensure state compliance 105(a) Certification/60106(a) Agreement requirements (fatality, injury requiring hospitalization, and damage exceeding \$50,000 - Mechanism should include receiving "after hours" reports)? (Chapter 6) is Question A.2  o = 0  incident recording form that is completed by the staff member that receives the telephonic notification. A spreadsheet is maintained to list all of the incidents reported into the TRA.	1 An incident	1 file is created after the
3	state rec	state held a pipeline safety TQ seminar(s) in the last 3 years? (NOTE: Indicate date of last seminar or if juested seminar, but T&Q could not provide, indicate date of state request for seminar. Seminars must at least once every 3 calendar years.) (Chapter 8.5) Previous Question A.4	2	2
SLR No	ites:			
		nolds a regulations update seminar that includes participation by a member of the Office of Training and Co. The last seminar was conducted in November, 2008.	)ualification	ns. The seminar is held
4		peline safety program files well-organized and accessible?(NOTE: This also includes electronic files) r 5) Previous Question A.5 $_{o=0}$	1	1
	The TRA l	keeps paper copies of inspection reports and supporting forms in file cabinets that are secure. The files are ears of inspection reports in each file.	organized !	by operator and unit
5	of PHM	e records and discussions with the state pipeline safety program manager indicate adequate knowledge SA program and regulations? (Chapter 4.1, Chapter 8.1) Previous Question A.6 o = 0 Needs Improvement = 1	2	2
exce	tes: Larry Boru llent unders	im, Chief - Pipeline Safety, has been in his position of managing the pipeline safety program for over two standing of the PHSMA's requirements for state pipeline safety programs operating under certification from o managing the program and has a good knowledge of the pipeline safety regulations.		



There were no items contained in the Chairman's letter that required a response.

(Chapter 8.1) Previous Question A.8 Yes = 1 No = 0

Did the state respond in writing within 60 days to the requested items in the Chairman's letter following the Region's last program evaluation? (No response is necessary if no items are requested in letter and mark "Yes")

6

SLR Notes:

<b>=</b>
<b>=</b>
=
=
_
<u>-</u>

What actions, if necessary, did the State initiate as a result of issues raised in the Chairperson's letter from the previous year? Did actions correct or address deficiencies from previous year's evaluation? (No response is necessary if no items are requested in letter and mark "Yes") (Chapter 8.1) Previous Question A.8/A.9

Yes = 1 No = 0

SLR Notes:

There were no issues raised in the Chairman's letter that required action from the TRA.

# Personnel and Qualifications

Has each inspector fulfilled the 3 year TQ training requirement? If No, has the state been granted a waiver regarding TQ courses by the Associate Administrator for Pipeline Safety? (NOTE: If the State has new inspectors who have not attended all TQ courses, but are in a program which will achieve the completion of all applicable courses within 3 years of taking first course (5 years to successfully complete), or if a waiver has been granted by the applicable Region Director for the state, please answer yes.) (Chapter 4.4) Previous Question A.10

Yes = 3 No = 0

### SLR Notes:

All inspectors have completed or are on track to complete the three year and five year requirements.

**9** Brief Description of Non-TQ training Activities:

Info Only Info Only

3

Info Only = No Points

For State Personnel:

None was conducted during 2009

For Operators:

Tom Woosley conducted training for selected small operators at six to seven locations during 2009

For Non-Operator Entities/Parties, Information Dissemination, Public Meetings:

None was conducted during 2009.

SLR Notes:

Did the lead inspectors complete all required T&Q OQ courses and Computer Based Training (CBT) before conducting OQ Inspections? (Chapter 4.4.1) Previous Question A.12

Yes = 1 No = 0

SLR Notes:

Yes. The OQ inspections conducted by the TRA were lead by inspectors that had completed the CBT based training required prior to the inspections

Did the lead inspectors complete all required TQ Integrity Management (IMP) Courses/Seminars and CBT before conducting IMP Inspections? (Chapter 4.4.1) Previous Question A.13

Yes = 1 No = 0

.

1

1

1

SLR Notes:

Yes. Training and Qualification records indicate that inspectors who lead IMP inspections received the required training prior to the inspections. The TRA has four individuals that are qualified to lead IMP inspections.

Was the ratio acceptable of Total inspection Person-days to Total Person-days charged to the program by state inspectors? (Region Director may modify points for just cause) (Chapter 4.3) Previous Question B.12

Yes = 5 No = 0

5 5

A. Total Inspection Person Days (Attachment 2):

B. Total Inspection Person Days Charged to the Program (220 X Inspection Person Years) (Attachment 7):

Ratio: A / B

If Ratio >= 0.38 Then Points = 5, If Ratio < 0.38 Then Points = 0

### SLR Notes:

The TRA logged 445 inspection person days during 2009. On its 2010 Certification, the TRA assigned 5 person years to its program. The ratio of inspection person days to inspection person years calculated to .40 which is greater than the minimum ratio of .38.

Have there been modifications or proposed changes to inspector-staffing levels? (If yes, describe) Previous Info Only Info Only Question B.13
Info Only = No Points

SLR Notes:

The TRA did not make any modifications to its staffing during 2009. There are no plans at this time to make changes in the fut

Part-A General Comments/Regional Observations
Info Only = No Points

Info Only Info Only

SLR Notes:

The TRA has generally complied with the requirements contained in Part A of this evaluation

Total points scored for this section: 26 Total possible points for this section: 26



# 

PAR'		- Inspections and Compliance - Procedures/Records/ erformance	oints(MAX	Score	
Ins		etion Procedures			
1	Do (Cl	these the State have a written inspection plan to complete the following? (all types of operators including LN hapter 5.1) Previous Question B.1 + Chapter 5 Changes + Incorporate LNG s = 6.5 No = 0 Needs Improvement = 50% Deduction	NG) 6.5	6.5	
	a	Standard Inspections (Including LNG) (Max points = 2)	Yes •	No O Need	ds rovement
	b	IMP Inspections (Including DIMP) (Max points = .5)	Yes •	Need	ds rovement
	c	OQ Inspections (Max points = .5)	Yes	- Need	ds rovement
	d	Damage Prevention (Max points = .5)	Yes	\ Need	ds rovement
	e	On-Site Operator Training (Max points = .5)	Yes	- Need	rovement
	f	Construction Inspections (Max points = .5)	Yes •	\ Need	ds rovement
	g	Incident/Accident Investigations (Max points = 1)	Yes •	- Need	ds rovement
	h	Compliance Follow-up (Max points = 1)	Yes •	- Need	ds rovement
	TRA l	has written procedures for its pipeline safety program. A portion of the procedures covers how inspections year that shows what operators and units will be inspected, the inspectors assigned, and the type of inspec			
2	Qu	d the written Procedures for selecting operators adequately address key concerns? (Chapter 5.1) Previous testion B.2, items a-d are worth .5 point each s = 2 No = 0 Needs Improvement = 50% Deduction	s 2	2	
	a	Length of time since last inspection	Yes	No O Need Impr	ds rovement
	b	History of Operator/unit and/or location (including leakage, incident and compliance history)	Yes •	Need Need	ds rovement
	c	Type of activity being undertaken by operator (construction etc)	Yes •	Need	ds rovement
	d	For large operators, rotation of locations inspected	Yes •	Need Need	ds rovement
	. The T	TRA's procedures cover all of the concerns in a, b, c, and d above. The TRA also develops a risk assessme ional factors not listed above.	nt of oprerator		
Ins	spec	etion Performance			
3	its	d the state inspect all types of operators and inspection units in accordance with time intervals established written procedures? (Chapter 5.1) Previous Question B.3 $= 2 \text{ No} = 0$	in 2	2	
		TRA provided a listing of the inspections performed during 2009. Upon a review of the listing, all inspecti	ons on the TRA	A's inspection pla	an were
4	(Cl	d the state inspection form cover all applicable code requirements addressed on the Federal Inspection for hapter 5.1 (3)) Previous Question B.4 $_{s=1 \text{ No}=0}$	rms? 1	1	
the 1	TRA ι regulat	atilizes a standard inspection form that is based upon the federal inspection form. The TRA conducts specions such as corrosion, regulator/relief valve, valve/leaks/patrolling. Regardless of the inspection type and the end of the form. The forms are written in a format similar to the protocol forms for OQ and IMP.			
5	Ye	d state complete all applicable portions of inspection forms? (Chapter 5.1 (3)) Previous Question B.5 $s = 1 \text{ No} = 0$	1	1	
SLR No		view of randomly selected inspection reports completed in 2009, all portions of the forms attached to the r	enorte wara co	mnleted	
	ni a iev	new or randomity selected hispection reports completed in 2007, all portions of the forms attached to the f	eports were co	приси.	
6		d the state initiate appropriate follow-up actions to Safety Related Condition Reports? (Chapter 6.3)	.5	.5	

Yes = .5 No = 0

### SLR Notes:

There were no safety related condition reports filed by an operator in Tennessee in 2009.

Did the state review operator procedures for determining if exposed cast iron pipe was examined for evidence .5 .5 7 of graphitization and if necessary remedial action was taken? (NTSB) Previous Question B.7

### SLR Notes:

The TRA reviews each operator's operation and maintenance procedures each year. In the past years, the TRA has requested that operators include procedures for examining cast iron pipe for graphitization. The TRA encourages operators to develop cast iron replacement programs.

Did the state review operator procedures for surveillance of cast iron pipelines, including appropriate action 8 resulting from tracking circumferential cracking failures, study of leakage history, or other unusual operating maintenance condition? (Note: See GPTC Appendix G-18 for guidance) (NTSB) Previous Question B.8 Yes = .5 No = 0

.5

### SLR Notes:

The TRA has provided a focus on the risks of cast iron mains. The TRA has encouraged operators to implement cast iron main replacement programs. The TRA has covered this issue in the past during the annual review of operators' operation and maintenance procedures. There are 211 miles of cast iron pipe left in the state of Tennessee.

9 Did the state review operator emergency response procedures for leaks caused by excavation damage near buildings and determine whether the procedures adequately address the possibility of multiple leaks and underground migration of gas into nearby buildings Refer to 4/12/01 letter from PHMSA in response to NTSB recommendation P-00-20 and P-00-21? (NTSB) Previous Question B.9 Yes = .5 No = 0

.5

.5

### SLR Notes:

Yes. The TRA reviews operators procedures for managing leaks. The TRA reviews operators' records documenting leak repairs. The TRA has required operators to look for leak migration when conducting leak detection and repairs.

Did the state review operator records of previous accidents and failures including reported third party damage 10 and leak response to ensure appropriate operator response as required by 192.617? (NTSB) Previous Question B.10

1

### SLR Notes:

The TRA reviews operators' records for leak detection, response and repairs. The TRA covers the requirements of 192.617 during standard inspections and special inspections covering valves/leaks/patrolling.

# Compliance - 60105(a) States

Did the state adequately document sufficient information on probable violations? (Chapter 5.2) Previous 11 1 Ouestion B.14

Yes = 1 No = 0 Needs Improvement = .5

### SLR Notes:

Yes. Upon a review of randomly selected inspection reports completed in 2009, the TRA inspectors stated the pipeline safety regulations that were in noncompliance. In the narrative portion of the reports, a detailed description was provided for the operator's actions or lack of actions that resulted in a probable violation.

Does the state have written procedures to identify the steps to be taken from the discovery to the resolution of a 12 probable violation as specified in the "Guidelines for State Participating in the Pipeline Safety Program"?

(Chapter 5.1) Previous Question D(1).1

Yes = 1 No = 0 Needs Improvement = .5

### SLR Notes:

The TRA describes it process for non compliance in its procedures. The steps and timeframes for action are detailed in the procedures.

Does the state have written procedures to notify an operator when a noncompliance is identified as specified in 1 13 the "Guidelines for States Participating in the Pipeline Safety Program"? (Chapter 5.1(4)) Previous Question D

Yes = 1 No = 0 Needs Improvement = 5

### SLR Notes:

Yes. The TRA's procedures outline the notifications that must take place including initial verbal notification and formal written notification.

Does the state have a written procedure for routinely reviewing the progress of compliance actions to prevent 14 delays or breakdowns of the enforcement process, as required by the "Guidelines for States Participating in the Pipeline Safety Program"? (Chapter 5.1(5)) Previous Question D(1).3

1

SLR Not	00	

Yes. After written notification of non compliance, probable violations are maintained in a log process as open probable violations. Probable violations remain open until corrective action is verified by the inspector in designated follow up inspections or future inspections. Prior to performing an inspection, the TRA inspectors are required to obtain information on open probable violations prior to making their inspection visit. The Administrative Assistant administers the status of probable violations.

Has the State issued compliance actions for all probable violations discovered? (Note: PHMSA representative has discretion to delete question or adjust points, as appropriate, based on number of probable violations; any change requires written explanation) Previous Question D(1).4

Yes = 1 No = 0

1

1

### SLR Notes:

Upon a review of randomly selected inspection reports completed in 2009, all probable violations were provided to operators by written notification and formal report.

Did the state follow its written procedures for reviewing compliance actions and follow-up to determine that prompt corrective actions were taken by operators, within the time frames established by the procedures and compliance correspondence, as required by the "Guidelines for States Participating in the Pipeline Safety Program"? Previous Question D(1).5

Yes = 1 No = 0 Needs Improvement = 5

### SLR Notes:

Upon a review of randomly selected files of inspection reports completed in 2009, all formal written reports contained a description of any open probable violations. A status was given for each open probable violation. Each open probable violation was deemed to be closed because corrective action evidence was provided by the operator was stated to remain open because proper corrective action had not taken place. The status of probable violations is maintained by the TRA's Administrative Assistant.

If compliance could not be established by other means, did state pipeline safety program staff request formal action, such as a "Show Cause Hearing" to correct pipeline safety violations? (check each states enforcement procedures) Previous Question D(1).6No = 0 Yes = 1

# 1

### SLR Notes:

During 2009 there were no operators that failed to comply with the TRA's notifications. There were no "show cause" hearings required.

Did the state adequately document the resolution of probable violations? (Chapter 5.1 (6)) Previous Question 1 D(1).7

Yes = 1 No = 0 Needs Improvement = .5

### SLR Notes:

Yes. The TRA documents closure of open probable violations. Open probable violations are tracked by the TRA's Administrative Assistant and inspectors.

Were compliance actions sent to a company officer? (manager or board member if municipal/government .5 .5 system) (Chapter 5.1(4)) Previous Question D(1).8

Yes = .5 No = 0

### SLR Notes:

Upon a review of randomly selected inspection reports completed in 2009, all written non compliance correspondence was addressed to an officer if the operator was a private company.

Did the compliance proceedings give reasonable due process to all parties? (check each states enforcement procedures) Previous Question D(1).9

Yes = 1 No = 0 Needs Improvement = .5

### SLR Notes

Yes. The TRA's procedures provide opportunities through an administrative process for operators to present evidence that a probable violation did not occur. In not resolved through the administrative process, operators have the opportunity to request a hearing before the Commissioners.

# Compliance - 60106(a) States

21 Did the state use the current federal inspection form(s)? Previous Question D(2).1

Yes = 1 No = 0 Needs Improvement = .5

SLR Notes:

Are results adequately documented demonstrating inspection units were reviewed in accordance with state inspection plan? Previous Question D(2).2

1

Were any probable violations identified by state referred to PHMSA for compliance? (NOTE: PHMSA 23 representative has discretion to delete question or adjust points, as appropriate, based on number of probable violations; any change requires written explanation.) Previous Question D(2).3 Yes = 1 No = 0 Needs Improvement = .5

SLR Notes:

Did the state immediately report to PHMSA conditions which may pose an imminent safety hazard to the public 24 or to the environment? Previous Question D(2).4

1

1

Yes = 1 No = 0 Needs Improvement = .5

SLR Notes:

Did the state give written notice to PHMSA within 60 days of all probable violations found? Previous 25 Question D(2).5

1

Yes = 1 No = 0 Needs Improvement = .5

SLR Notes:

Did the state initially submit adequate documentation to support compliance action by PHMSA on probable 26 violations? Previous Question D(2).6

1

Yes = 1 No = 0 Needs Improvement = .5

SLR Notes:

27 Part B: General Comments/Regional Observations Info Only Info Only

Info Only = No Points

SLR Notes:

There were issues identified that prevented giving all of the available points in Part B of this evaluation.

Total points scored for this section: 31

Total possible points for this section: 31



1	Did the state use the current federal inspection form(s)? Previous Question D(3).1  Yes = 1 No = 0 Needs Improvement = .5	1	1
SLR No			
The	TRA is not an interstate agent.		
2	Are results documented demonstrating inspection units were reviewed in accordance with "PHMSA directed inspection plan"? Previous Question D(3).2  Yes = 1 No = 0 Needs Improvement = .5	1	1
SLR No	tes:		
The	TRA is not an interstate agent.		
3	Did the state submit documentation of the inspections within 60 days as stated in its latest Interstate Agent Agreement form? Previous Question $D(3).3$ Yes = 1 No = 0	1	1
SLR No	tes:		
The	TRA is not an interstate agent.		
4	Were any probable violations identified by state referred to PHMSA for compliance? (NOTE: PHMSA representative has discretion to delete question or adjust points, as appropriate, based on number of probable violations; any change requires written explanation.) Previous Question D(3).4 $Y_{es} = 1 N_0 = 0$	1	1
SLR No			
	TRA is not an interstate agent.		
5	Did the state immediately report to PHMSA conditions which may pose an imminent safety hazard to the public or to the environment? Previous Question $D(3).5$ Yes = 1 No = 0 Needs Improvement = .5	1	1
SLR No	tes:		
The	TRA is not an interstate agent.		
6	Did the state give written notice to PHMSA within 60 days of all probable violations found? Previous Question D(3).6  Yes = 1 No = 0	1	1
SLR No			
	TRA is not an interstate agent.		
7	Did the state initially submit documentation to support compliance action by PHMSA on probable violations? Previous Question D(3).7  Yes = 1 No = 0 Needs Improvement = .5	1	1
SLR No	·		
The	TRA is not an interstate agent.		

8 Part C: General Comments/Regional Observations Info Only Info Only

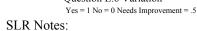
Info Only = No Points SLR Notes:

The TRA is not an interstate agent.

Total points scored for this section: 7 Total possible points for this section: 7



1	Are state personnel following the procedures for Federal/State cooperation in case of an incident? (See Appendix in "Guidelines for States Participating in the Pipeline Safety Program") (Chapter 6.1) Previous Question E.1  Yes = 1 No = 0 Needs Improvement = .5	1		1
	•	at occurred	l during 20	09 that required
2	Are state personnel familiar with the jurisdictional authority and Memorandum of Understanding between NTSB and PHMSA? (See Appendix in "Guidelines for States Participating in the Pipeline Safety Program") (Chapter 6? Appendix D) Previous Question E.2  Yes = .5 No = 0	.5		.5
SLR N	otes:			
	s. Larry Borum, Chief - Pipeline Safety, exhibited a good understanding of the agreement of cooperation contained in	the MOU	between P	PHMSA and the
3	Did the state keep adequate records of incident notifications received? Previous Question E.3  Yes = 1 No = 0 Needs Improvement = .5	1		1
SLR No	otes:			
The	TRA maintains a reporting log of all incidents reported into the TRA including those that do not meet the reporting	criteria in	49CFR191	
4	If an onsite investigation of an incident was not made, did the state obtain sufficient information by other means to determine the facts and support the decision not to go on-site? Previous Question E.4  Yes = 1 No = 0 Needs Improvement = .5	1		1
SLR No				
The	ere were two incidents meeting Part 191 criteria that were reported during 2009.			
5	Were investigations thorough and conclusions and recommendations documented in an acceptable manner? Previous Question E.5, comprehensive question worth 2 points total  Yes = 2 No = 0 Needs Improvement = 1	2		2
	a. Observations and Document Review	Yes 💿	No 🔾	Needs Improvement
	b. Contributing Factors	Yes •	No 🔾	Needs Improvement
	c. Recommendations to prevent recurrences where appropriate	Yes 💿	No 🔘	Needs Improvement
SLR No	otes:			provenient
The	ere were two accidents investigated thoroughly conclusions and recommendations were documented in an acceptable	manner		
6	Did the state initiate enforcement action for violations found during any incident investigation(s)? Previous Question E.6 Variation	1		1



There were no violations found in the accidents investigated in 2009

7 Did the state assist region office by taking appropriate follow-up actions related to the operator incident reports to ensure accuracy and final report has been received by PHMSA? (validate annual report data from operators concerning incidents/accidents and investigate discrepancies) (Chapter 6) Previous Question E.7/E.8 Yes = .5 No = 0

.5 0.5

### SLR Notes:

Yes. The TRA responded to requests to follow up with operators who submitted written incident reports. The TRA was helpful in allowing some incident reports to be closed in ODES.

8 Part D: General Comments/Regional Observations

Info Only = No Points

Info Only Info Only

### SLR Notes:

The TRA generally complied with the requirements contained in Part D of this evaluation. There were no reportable incidents during 2009.

Total points scored for this section: 7 Total possible points for this section: 7



# **PART E - Damage Prevention Initiatives**

Points(MAX)

2

2

1	Has the state reviewed directional drilling/boring procedures of each pipeline operator or its contractor to
	determine if they include actions to protect their facilities from the dangers posed by drilling and other trench
	less technologies? Previous Question B.11
	Yes = 2 No = 0 Needs Improvement = 1

2

SLR Notes:

Yes. The TRA reviews operators' Operation and Maintenance Procedures each year. The TRA verifies that operators have procedures in place that address the use of trenchless excavation.

Did the state inspector check to assure the pipeline operator is following its written procedures pertaining to notification of excavation, marking, positive response and the availability and use of the one call system? New 2008

2

2

Yes = 2 No = 0

SLR Notes:

This issued is covered on the TRA's inspection checklist. It is reviewed when the TRA covers the requirements in 192.614.

Did the state encourage and promote the adoption of the Common Ground Alliance Best Practices document to 3 its regulated companies as a means of reducing damages to all underground facilities? Previous Question A.7 Yes = 2 No = 0 Needs Improvement = 1

SLR Notes:

Yes. The TRA works closely with the Tennessee one call system, Tennessee 811. The TRA has encouraged Tennessee 811 and gas pipeline operators to incorporate the best practices that effect their processes and procedures related to damage prevention.

Has the agency or another organization within the state collected data and evaluated trends on the number of pipeline damages per 1,000 locate requests? New 2008

SLR Notes:

Tennessee 811 collects this information from its members on a voluntary basis. Tennessee 811 submits this data to CGA's DIRT reporting system. The TRA receives Tennessee 811's damage information each year or on an adhoc basis when requested.

5 Did the state review operators' records of accidents and failures due to excavation damage to ensure causes of failure are addressed to minimize the possibility of recurrence as required by 192.617?

2

SLR Notes:

Yes. The TRA covers 192.617 requirements on is standard inspection form.

6 Part E: General Comments/Regional Observations Info Only Info Only

Info Only = No Points

SLR Notes:

The TRA is generally complying with the requirements of Part E of this evaluation. The TRA made a concertive effort to have the damage prevention law changed in 2009. The TRA has plans to continue pursuing changes in Tennessee's damage prevention laws to incorporate the Nine Elements contained in the PIPES Act.

Total points scored for this section: 9

Total possible points for this section: 9



1	Operator, hispector, Location, Date and Filmisa Representative	Info Only	Info Only
	Info Only = No Points		
	Name of Operator Inspected: City of Lebanon Gas Department		
	Name of State Inspector(s) Observed: Tom Woosley		
	Location of Inspection: Lebanon, Tennessee		
	Date of Inspection: 7/14/2010		
	Name of PHMSA Representative: Dale Bennett, PHMSA State Evaluator		
SLR No	tes:		
	Snodgrass, Gas Manager, represented Lebanon Gas Department during the inspection. Standard Inspection which ization and atmospheric corrosion observation.	included rel	iefs, regulators,
2	Was the operator or operator's representative notified and/or given the opportunity to be present during inspection? New 2008 $_{\text{Yes}} = 1 \text{ No} = 0$	1	1
SLR No	tes:		
Yes.	The TRA inspector notified the operator 14 days prior to the date of inspection.		
3	Did the inspector use an acceptable inspection form/checklist and was the form/checklist used as a guide for the inspection? (New regulations shall be incorporated) Previous Question F.2 $Y_{es} = 2 N_0 = 0$	2	2
SLR No Yes. form	tes: The TRA inspector used PHMSA's Inspection Form for Standard Inspections. The inspector stepped through the ins	spection by	using the inspection
4	Did the inspector thoroughly document results of the inspection? Previous Question F.3 $Yes = 2 No = 0$	2	2
SLR No	tes:		
Yes.	The TRA inspector entered the results of each item on the federal inspection form that was loaded into his laptop co	omputer.	
5	Did the inspector check to see if the operator had necessary equipment during inspection to conduct tasks viewed? (Maps, pyrometer, soap spray, CGI, etc.) New 2008 $Y_{es} = 1 N_0 = 0$	1	1
SLR No			
	inspector check to see if the operator had all necessary equipment to conduct tasks performed on the operator's facil	ities during	this inspection.
6	What type of inspection(s) did the state inspector conduct during the field portion of the state evaluation? (i.e. Standard, Construction, IMP, etc) New 2008  Info Only = No Points	Info Only	Info Only
SLR No	tes:		
The	TRA conducted a standard inspection using PHSMA's standard inspection form.		
7	Did the inspector adequately review the following during the field portion of the state evaluation? (check all that apply on list) New 2008, comprehensive question worth 2 points total $Yes = 2 No = 0$ Needs Improvement = 1	2	2
	a. Procedures	$\boxtimes$	
	b. Records		
	c. Field Activities/Facilities	$\boxtimes$	
	d. Other (Please Comment)		

SLR No Yes.		aspector covered all of the items checked above.		
8		nspector have adequate knowledge of the pipeline safety program and regulations? (Liaison will at reasons if unacceptable) Previous Question F.8	2	2
	otes: Mr. Woosle	by has been involved in pipeline safety for 20 years. He exhibited excellent knowledge of the pipeline sated into the regulations.	safety regula	tions and NFPA standard
9	Did the i on areas Yes = 1 No	nspector conduct an exit interview? (If inspection is not totally complete the interview should be based covered during time of field evaluation) Previous Question F.10	l 1	1
	otes:	of the inspection day on 7/14/2010, Mr. Woosley provided the operator with a summary of his inspecti	on. There we	ere no probable violations
10	During to Question Yes = 1 No		s 1	1
SLR No		tor notified the operator that no probable violations were found during the inspection.		
11	performe		Info Only	Info Only
	otes: inspector ob	No Points served the operator at several locations locking up regulators, checking set pressure on relief valves and a pipe at the pressure reducing stations.	d noticed no	atmospheric corrosion
12		ctices to Share with Other States - (Field - could be from operator visited or state inspector practices)  = No Points	Info Only	Info Only
SLR No	otes:	t practices to communicate to others as a result of this inspection		
13		servation Areas Observed (check all that apply) = No Points	Info Only	Info Only
	a.	Abandonment		
	b.	Abnormal Operations	Ē	
	c.	Break-Out Tanks	П	
	d.	Compressor or Pump Stations		
	e.	Change in Class Location		
	f.	Casings		
	g.	Cathodic Protection	$\boxtimes$	
	h.	Cast-iron Replacement		
	i.	Damage Prevention		
	j.	Deactivation		
	k.	Emergency Procedures		
	1.	Inspection of Right-of-Way		
	m.	Line Markers		
	n.	Liaison with Public Officials		
	0.	Leak Surveys		
	p.	MOP		
	q.	MAOP		
	r.	Moving Pipe		
	S.	New Construction		

	t.	Navigable Waterway Crossings		
	u.	Odorization	$oxed{\boxtimes}$	
	v.	Overpressure Safety Devices	  X	
	W.	Plastic Pipe Installation		
	X.	Public Education		
	y.	Purging	$\overline{\Box}$	
	z.	Prevention of Accidental Ignition		
	A.	Repairs		
	B.	Signs		
	C.	Tapping		
	D.	Valve Maintenance		
	E.	Vault Maintenance		
	F.	Welding		
	G.	OQ - Operator Qualification		
	H.	Compliance Follow-up		
	I.	Atmospheric Corrosion		
	J.	Other		
	inspector ob	served the operator at several locations ed pipe at the pressure reducing station	locking up regulators, checking set pressure on relief valves and noticed no s.	atmospheric corrosion
14	Part F: (	General Comments/Regional Observation	ons Info Only	Info Only
SLR No	-	- NO I OHIO		
The Insp	TRA inspections. Mr.		the municipal facilities. The inspection was conducted using PHMSA's inspection professional manner and treated the operator's representative with the utmost	
-			Total points scored fo	or this section: 12



Total possible points for this section: 12

# PART G - PHMSA Initiatives - Strategic Plan

### Points(MAX) Score

# Risk base Inspections - Targeting High Risk Areas

Does state have process to identify high risk inspection units?

1.5

1.5

Yes = 1.5 No = 0

Risk Factors (criteria) to consider may include:

Miles of HCA's, Geographic area, Population Density

Length of time since last inspection

History of Individual Operator units (leakage, incident and compliance history, etc.)

Threats - (Excavation Damage, Corrosion, Natural Forces, Other Outside Forces, Material or Welds,

Equipment, Operations, Other)

### SLR Notes:

Yes. The TRA has developed risk factors that it has determined to be important to pipeline safety. The criteria are: Pipe material Length of time since last inspection Incident history Non-compliance history Leak history Unaccounted for gas Services Each inspection unit of an operator is assigned points for each of the risk factors. A spreasheet is used to calculate a total risk score for each unit. The TRA's inspectors use the risk scores to prioritize their inspections during the inspection year.

2 Are inspection units broken down appropriately? (see definitions in Guidelines) .5 0.5

Yes = .5 No = 0

### SLR Notes:

Yes. A majority of the TRA's operators are municipalities and utility districts. These are easily organized into seperate units. The two large local distribution operator's systems are broken into inspection units that follow the inspection units described in the Guidelines.

3 Consideration of operators DIMP Plan? (if available and pending rulemaking) Info Only Info Only

### SLR Notes:

The Distribution Integrity Management Program rule is not a final rule at this time.

Does state inspection process target high risk areas?

0.5

.5

### SLR Notes:

Through the use of the risk assessment tool developed by the TRA and the subjective knowledge of its inspectors, the TRA does conduct special inspections which concentrate on the higher risk areas.

# Use of Data to Help Drive Program Priority and Inspections

0.5 .5 Does state use data to analyze effectiveness of damage prevention efforts in the state? (DIRT or other data, etc)

Yes = 5 No = 0

### SLR Notes:

Yes. The TRA accesses the information contained in CGA's Dirt program. The TRA reviews the information for trends. The damage data was used to prepare its damage prevention grant justification and to develop its arguments for changing the damage prevention law in Tennessee

.5 6 Has state reviewed data on Operator Annual reports for accuracy?

### SLR Notes:

Yes. The TRA reviews each operator's Annual Report after its submittal to PHMSA. After the accuracy of information is verified, the TRA transfers the data onto a spreadsheet that contains all operator's data.

.5 0.5 7 Has state analyzed annual report data for trends and operator issues? Yes = .5 No = 0

### SLR Notes:

Yes. The TRA enters data from the annual reports into spreadsheets. The TRA reviews the trending of remaining cast iron and bare steel mains. The TRA also looks at leak repair data, growth in the construction of mains and services and the level of unaccounted for gas. The TRA should create charts utilizing the data for a visual inspection of the trends.

.5 8 Has state reviewed data on Incident/Accident reports for accuracy?

Yes = .5 No = 0

0.5

0.5

### SLR Notes:

Yes. The TRA reviews each written incident report filed by operators. The TRA checks the information reported on the forms for accuracy and completeness. The TRA also verifies that the information is consistent with the information obtained by the TRA in its investigation.

9 Does state do evaluation of effectiveness of program based on data? (i.e. performance measures, trends, etc.) .5 0.5

Yes = .5 No = 0

### SLR Notes:

The TRA has performance measures that it must report to the Governor's office each year. The perormance measures are primarily focused on the inspection activity for the year. The TRA compiles this data which is also used for the annual Certification. The TRA should identify additional performance measures and develop the collection of data to measure its performance in addition to those required by the governor's office

Did the State input all operator qualification inspection results into web based database provided by PHMSA in a timely manner upon completion of OQ inspections? Previous Question B.15

Yes = .5 No = 0

### SLR Notes:

Yes. Upon a review of PHMSA's Operator Qualification Database, the TRA had uploaded the completed Protocol Forms into the database.

Did the State submit their replies into the Integrity Management Database (IMDB) in response to the Operators .5 0.5 notifications for their integrity management program? Previous Question B.16

Yes = .5 No = 0

### SLR Notes:

Upon a review of the Integrity Management Database, there were notifications from operators that had transmission pipeline facilities in Tennessee. There were responses from the TRA in the notifications.

Have the IMP Federal Protocol forms been uploaded to the IMDB? Previous Question B.17 Yes = .5 No = 0

### SLR Notes:

Yes. The TRA has completed Integrity Management Program (IMP) inspections of operator's IMP plans and has uploads the completed IMP Protocol Forms into the IMDB.

Did the State ask Operators to identify any plastic pipe and components that has shown a record of defects/leaks

.5

and what those operators are doing to mitigate the safety concerns? Previous Question B.18

Yes = .5 No = 0

### SLR Notes:

Yes. The TRA has asked operators to identify any consistent problems with plastic pipe or components in their systems as part of its standard inspections. No consistent problems have been communicated to the TRA at this time. Operators have been requested to participate in the Plastic Pipe Database effort by submitting information on plastic pipe or component failures to the AGA.

Has state confirmed transmission operators have submitted information into National Pipeline Mapping System .5 (NPMS) database along with any changes made after original submission?

### SLR Notes:

The TRA has reviewed the National Pipeline Mapping System (NPMS) from time to time. Upon a review during the evaluation, there were four operators whose pipelines were not included in the NPMS. All transmission operators have submitted their pipeline information to the NPMS.

# Accident/Incident Investigation Learning and Sharing Lessons Learned

Has state shared lessons learned from incidents/accidents? (i.e. NAPSR meetings and communications) .5 0.5

Yes = .5 No = 0

Yes = .5 No = 0

### SLR Notes:

Yes. The TRA made a presentation at NAPSR's Southern Region Meeting held in 2009. The TRA described the incidents that had occurred during the year prior to the meeting.

16 Does the State support data gathering efforts concerning accidents? (Frequency/Consequence/etc) .5 0.5

### SLR Notes:

There were no requests made of the TRA to provide data related to accidents.

Does state have incident/accident criteria for conducting root cause analysis?

Info Only Info Only



### SLR Notes:

No. The TRA has not received training in root cause analysis.

18 Does state conduct root cause analysis on incidents/accidents in state?

Info Only Info Only

Info Only = No Points

### SLR Notes:

No. The TRA has not obtained the skills to conduct root cause analysis.

19 Has state participated on root cause analysis training? (can also be on wait list)

.5 0.5

Yes = .5 No = 0

### SLR Notes:

No. The TRA has not obtained the skills to conduct root cause analysis.

# Transparency - Communication with Stakeholders

Other than pipeline safety seminar does State communicate with stakeholders? (Communicate program data, .5 0.5 pub awareness, etc.)

Yes = .5 No = 0

### SLR Notes:

The TRA attends Tennessee Damage Prevention Committee meetings which has a number of stakeholders involved. The TRA participates in the Tennessee Gas Association. Larry Borum is on the Education Steering Committee of the Tennessee Gas Association.

21 Does state share enforcement data with public? (Website, newsletters, docket access, etc.)

.5 0.5

Yes = .5 No = 0

### SLR Notes:

The Pipeline Safety newsletter is published by the TRA annually and is made available to operators, public officials and the public. The newsletter contains a description of the activities taken by the TRA during the year but could have more enforcement information.

22 Part G: General Comments/Regional Observations

Info Only Info Only

Info Only = No Points

### SLR Notes:

The TRA has completed Integrity Management Program (IMP) inspections of operator's IMP plans. The Pipeline Safety newsletter is published by the TRA annually and is made available to operators, public officials and the public. The newsletter contains a description of the activities taken by the TRA during the year but could have more enforcement information. The TRA should develop a summary of its inspection and enforcement statistics and publish it on the TRA's web page so that it more transparent to stakeholders. The TRA has performance measures that it must report to the Governor's office each year. The perormance measures are primarily focused on the inspection activity for the year. The TRA compiles this data which is also used for the annual Certification. The TRA should identify additional performance measures and develop the collection of data to measure its performance in addition to those required by the governor's office. The TRA has reviewed the National Pipeline Mapping System (NPMS) from time to time.

Total points scored for this section: 10 Total possible points for this section: 10



What were the major accomplishments for the year being evaluated? (Describe the accomplishments, NAPSR .5 0.5

Activities and Participation, etc.)

Yes = .5 No = 0

### SLR Notes:

The most significant accomplishment by the Gas Pipeline Safety Division during calendar year 2009 was the preparation of a revised damage prevention law for the state of Tennessee. This process included the evaluation of the Georgia, Virginia and Illinois damage prevention laws and extensive discussions with Georgia and Virginia damage prevention section staff members. Another major accomplishment came in the area of improving communication with operators relative to new pipeline safety issues and clarification/re-emphasis of existing requirements.

What legislative or program initiatives are taking place/planned in the state, past, present, and future? (Describe .5 initiatives (i.e. damage prevention, jurisdiction/authority, compliance/administrative, etc.)

Yes = .5 No = 0

### SLR Notes:

The TRA developed proposed legislation that proposed changes to Tennessee's damage prevention laws that would have implemented all of the Nine Elements contained in the PIPES Act. Larry Borum spent a considerable amount of time and effort putting the proposed legislation together. The proposed legislation did not get passed but it set the stage for future consideration and was successful in being assigned to a special study committee that will report to the legislature.

Any Risk Reduction Accomplishments/Projects? (i.e. Cast iron replacement projects, bare steel, third-party damage reductions, etc.)

Yes = .5 No = 0

### SLR Notes:

The TRA has supported several cast iron and bare steel replacement programs with different operators. .

4 Did the state participate in/respond to surveys or information requests from NAPSR or PHMSA?

### SLR Notes:

The TRA responded to all surveys and requests

Yes = 1 No = 0

5 Sharing Best Practices with Other States - (General Program)

Yes = .5 No = 0

.5 0.5

### SLR Notes:

The TRA has shared its risk assessment process and spreadsheet to other state programs in the Southern Region

6 Part H: General Comments/Regional Observations
Info Only = No Points

Info Only = No Points

### SLR Notes:

The TRA has generally met the expectations contained in Part H of this evaluation. The TRA should be commended for its efforts to change the damage prevention laws in Tennessee during 2009.

Total points scored for this section: 3 Total possible points for this section: 3



# PART I - Program Initiatives

### Points(MAX) Score

# Drug and Alcohol Testing (49 CFR Part 199)

Has the state verified that operators have drug and alcohol testing programs?

1

Yes = 1 No = 0

### SLR Notes:

Yes. The TRA has completed drug and alcohol inspections of all operator's plans. The requirements are covered on the TRA's Special Inspection Form.

Is the state verifying that operators are conducting the drug and alcohol tests required by the operators program 2 (random, post-incident, etc.)

0.5

.5

### Yes = .5 No = 0SLR Notes:

Yes. The TRA includes questions on its Special Inspection Form that covers operator's requirements to perform the required pre-employment, random, post incident and testing for cause, and return to duty tests.

3 Is the state verifying that any positive tests are responded to in accordance with the operator's program? .5 0.5

### SLR Notes:

As part of its Special Inspection investigations, the TRA reviews the summary results of an operator's testing program. If the summary of test results shows positive test results, the TRA follows up with the operator on its response to the positive tests.

# Qualification of Pipeline Personnel (49 CFR Part 192 Subpart N)

Has the state verified that operators have a written qualification program?

1

0.5

Yes = 1 No = 0

### SLR Notes:

Yes. The TRA completed a review of all operators' Operator Qualification plans in 2005. The TRA follows up on any changes to operator's plans and conducts field inspections of operators' personnel.

5 Has the state reviewed operator qualification programs for compliance with PHMSA rules and protocols? 0.5

.5

### SLR Notes:

Yes. The TRA conducted OQ inspections utilizing PHSMA's Operator Qualification Protocols.

Is the state verifying that persons who perform covered tasks for the operator are qualified in accordance with .5 0.5 6 the operator's program?

Yes = .5 No = 0

### SLR Notes:

Yes. The TRA conducts Protocol 9 inspections of operator personnel. Operator personnel are observed performing some of the covered tasks for which they have been qualified. The TRA has uploaded the results of some of these Protocol 9 inspections.

Is the state verifying that persons who perform covered task for the operator are requalified at the intervals .5 7 specified in the operator's program?

Yes = .5 No = 0

### SLR Notes:

Yes. The TRA has reviewed operator's Operator Qualification records to verify that operators are requalifying personnel within the established timeframes set in their plans.

# Gas Transmission Pipeline Integrity Management (49 CFR Part 192 Subpart O)

Has the state verified that all operators with transmission pipelines have either adopted an integrity management 8 program (IMP), or have properly determined that one is not required? Yes = 1 No = 0

### SLR Notes:

Yes. The TRA has conducted a minimum of two inspections visits with all operators of gas transmission facilities. The TRA has confirmed that plans exist for operators that are required to have plans.

9 Has the state verified that in determining whether a plan is required, the operator correctly calculated the potential impact radii and properly applied the definition of a high consequence area?

0.5

.5

Yes = .5 No = 0



### SLR Notes:

Yes. The TRA used the protocol forms to review operators' definitions for HCA's and the calculations of potential impact radii along the pipeline facilities

Has the state reviewed operator IMPs for compliance with Subpart O? (In accordance with State Inspection 10

.5 0.5

Yes = .5 No = 0

### SLR Notes:

The TRA utilized PHMSA's IMP Protocols while conducting its inspections. The protocol forms were completed which described issues or no issues in its

Is the state monitoring operator progress on the inspections, tests and remedial actions required by the operator's 11 IMP, including that they are being done in the manner and schedule called for in its IMP?

0.5

Yes = .5 No = 0

### SLR Notes:

Yes. At the end of 2008, the TRA had verified that operators had completed assessment of at least 50% of HCA mileage.

12 Is the state verifying that operators are periodically examining their transmission line routes for the appearance of new HCAs?

0.5

.5

SLR Notes:

Yes. The TRA verified that the operators identified processes that would be undertaken to determine if new HCA's develop. The TRA reviews records to determine if operators have implemented the processes and what results the operators documented.

# Public Awareness (49 CFR Section 192.616)

Has the state verified that each operator has developed a continuing public awareness program? (due date was 13 6/20/06 for most operators, 6/20/07 for certain very small operators,6/13/08 for master meters) Yes = .5 No = 0

0.5

SLR Notes:

Yes. The TRA participated in the Clearinghouse review process. The TRA received the Clearinghouse conclusions from its review. The TRA sent notifications to operators who were found to have deficiencies. The TRA requested these operators to amend their plans to correct the deficiencies. The TRA followed up on the amendment notifications. Operaters that did not complete the corrections within the allotted timeframes were cited and sent non compliance letters.

Has the state reviewed the content of these programs for compliance with 192.616 (by participating in the 14 Clearinghouse or by other means)?

0.5

5

.5

Yes = .5 No = 0

### SLR Notes:

The TRA participated in the Clearinghouse process.

15 Is the state verifying that operators are conducting the public awareness activities called for in its program?

0.5

Yes = .5 No = 0SLR Notes:

Yes. As part of its standard inspection, the TRA reviews operators' records that document the activities taken to comply with Public Awareness Plans.

Is the state verifying that operators have evaluated their Public Awareness programs for effectiveness as 16 described in RP1162? Info Only = No Points

Info Only Info Only

SLR Notes:

Yes. As part of its standard inspection, the TRA reviews operators' records that document the activities taken to comply with Public Awareness Plans.

17 Part I: General Comments/Regional Observations Info Only Info Only

Info Only = No Points

SLR Notes:

The TRA has generally complied with the requirements covered by Part I of this evaluation. The TRA received all possible points assigned to Part I.

Total points scored for this section: 9

Total possible points for this section: 9

